



### **QUALIFICATIONS**

- Twenty-nine (29) years of Telecommunications Engineering experience; primary focus on propagation and spectrum engineering
- Experienced in RF communications systems design, analysis, and troubleshooting
- Full life-cycle expertise in system design, interference analysis, frequency sharing and coordination in mixed microwave, satellite and personal communications systems environments
- Experienced in the use of a wide variety of measurement and analysis equipment and software tools required in a field testing environment
- Technical training and preparation of course materials
- Demonstrated ability as a group and project manager as well as a senior team member in both a technical and operational level

# **ENGINEERING EXPERIENCE**

Comsearch

1978 - Present

# Comsearch – Ashburn, VA USA (September 2003 – Present)

Director, Field Services

• Complete operational and P&L responsibility for the Comsearch Field Services Department. This director level position reports to the Vice President of Comsearch and includes all resource scheduling, customer liaison and management oversight of the Field Services Department. The Field Services Department provides a full range of onsite radio frequency interference (RFI) and electromagnetic interference (EMI) measurements, radiation hazard testing, troubleshooting, physical path and system surveys and specialized RF propagation and spectrum analysis. In addition to the onsite measurements provided by the Field Services Department, office-based theoretical engineering studies are also performed.

# Comsearch – Ashburn, VA USA (April 2002 – August 2003) Director, Software Products

Overall responsibility for the Comsearch commercially available software products including iQ.link<sup>TM</sup>, iQ.clear<sup>TM</sup> and FiveNines. Direct reports include the Product Manager responsible for the software development and the Manager, Customer Support responsible for all customer support issues. This senior management position includes complete product life-cycle planning, implementation and execution, divisional P&L responsibility, marketing and sales efforts support the products, and pricing and contract negotiations.

# Comsearch – Sydney, Australia and Singapore (January 2001 – March 2002) General Manager, Comsearch Southeast Asia

 Responsible for establishing a permanent presence for Comsearch engineering services and software sales in the Asia/Pacific marketplace. Duties include: initiating permanent office facilities and resources supporting the Asia/Pacific region, marketing and brand awareness to the broad customer base, corporate and technical presentations, proposal generation, contract negotiation, and project management. Close interaction with customers, vendors and subcontractors for costing, scheduling and operational milestones.

# Comsearch - Reston, VA USA (1978 - 2001)

Senior Manager, Field Services

Responsible of all phases of managing the Comsearch Field Services division which
includes all field measurement activities including RFI/EMI testing for satellite, fixed
network microwave and mobile applications, on-site radiation hazard analysis, path and
site surveys, site and system audits, and EMI troubleshooting. Duties include staff
resourcing, division budgetary analysis, proposal generation, customer liaison, and
management oversight.

#### Product Manager, Software Solutions

Responsible for the total life cycle planning and implementation of the Comsearch
iQ.link<sup>TM</sup> and FiveNines software products. Duties include: end-to-end project
management, software requirement definition, scheduling of resources including
technical staff, software development personnel, technical documentation resources,
product branding, customer sales and contract negotiation.

#### Senior Account Manager, Engineering and Software Solutions

Lead sales account responsibility for major Comsearch customers worldwide. Duties
include: sales opportunity identification, customer requirement determination,
quantitative analysis of opportunity, development of scope of service offerings to meet
customer requirements, proposal generation, sales presentations, contract negotiation,
and on-going customer management. Position required interpersonal skills to manage
and merge customer requirements with multi-level engineering and administrative
departments within Comsearch.

#### Engineering Support, Satellite Earth Station Services

- Progressively challenging position and responsibilities in the analysis of terrestrial/satellite radio frequency interference (RFI) conflicts, spectrum sharing, and coordination
- Field technician performing RFI/EMI on-site measurements in support of satellite earth stations and terrestrial based networks

# Spectrum Analysis and Frequency Engineering - Arlington, Virginia (1975-1978)

Satellite Earth Station Engineering Support

- Interference analysis and frequency coordination for transmit/receive and receive-only C-band and Ku-band earth stations
- On-site field measurements and analysis for satellite earth station and terrestrial microwave networks
- Propagation and spectrum engineering analysis
- Regulatory (Federal Communication Commission, Federal Aviation Administration, Zoning Commissions) license and documentation support

#### RELEVANT ENGINEERING TRAINING

- Satellite Communication Symposium
- Microwave System Planning, Engineering, and Frequency Coordination
- Antenna Engineering
- FCC Regulatory Overview

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# **ACCOMPLISHMENTS**

- Society of Satellite Professionals International (SSPI) founding board member of the Washington, DC chapter 1979
- Lead Comsearch technical and regulatory trainer for courses sponsored through the United States Telecommunication Training Institute (USTTI). Courses include 1) Spectrum Management in the Civil Sector and 2) Computerized Spectrum Engineering and Management.

# **PERSONAL**

Citizenship: USA

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